UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,736	10/31/2003	Jerry Z. Shan	200208138-1	3123

22879 7590 12/28/2006	EXAMINER	
HEWLETT PACKARD COMPANY	KUNDU, SUJOY K	
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INTELLECTUAL PROPERTY ADMINISTRATION	ART UNIT	PAPER NUMBER
FORT COLLINS, CO 80527-2400	2863	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/28/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

		Application No.	Applicant(s)
Office Action Summary		10/698,736	SHAN ET AL.
		Examiner	Art Unit	
		Sujoy K. Kundu	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>22 November 2006</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

U.S. Patent and Trademark Office

PTOL-326 (Rev. 08-06)   Office Action Summary   Part of Paper No./Mail Date 20061214

DETAILED ACTION

Remarks

The 35 U.S.C. 101 rejection set forth in the Office Action dated August 18, 2006

has been withdrawn. The reasons for the withdrawal are not due to the case laws

presented in the arguments of the applicant dated November 22, 2006. Examiner would

like to respectfully point out that the interim guidelines are in section 2106 of the MPEP.

Based on the claims alone " training " a detector is considered an abstract idea.

However, upon further review of the specification (Paragraph 30, Lines 3-6), " training "

is disclosed as setting a detector to detect, which is tangible.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12, 14-23, 25-30 are rejected under 35 U.S.C. 102(b) as being

anticipated by Wilks et al. (6,107,919).

With regards to Claim 1, 12, 15, 17, 22, 25, and 27 Wilks teaches a processor-

based method comprising:

receiving a data stream comprising a plurality of temporally ordered data points

(Figure 1A,B, Abstract, Column 7, Lines 17-Column 8, Line 15);

generating a plurality of sequences from a first portion of the data stream (Figure

1A,B, Abstract, Column 7, Lines 17-Column 8, Line 15); and

training a detector by determining a value for a sensitivity parameter using the

plurality of sequences (Figure 1A,B, Abstract, Column 7, Lines 17-Column 8, Line 15) .

With regards to Claim 3, 19, 26, Wilks teaches a method wherein running the

detector comprises:

generating a score corresponding to the second portion of the data stream;

comparing the score to the determined value for the sensitivity parameter; and

signaling detection (Column 7, Lines 17-49).

With regards to Claim 2 and 16, Wilks teaches the method comprising running

the detector on a second portion of the data stream (Column 7, Lines 30-48).

With regards to Claim 4 and 18, Wilks teaches the method wherein training the

detector by determining the value for the sensitivity parameter comprises selecting the

value for the sensitivity parameter based on a target level for an estimated performance

characteristic of the detector (Column 7, Lines 17-29).

With regards to Claim 5, Wilks teaches the method wherein training the detector

by determining the value for the sensitivity parameter comprises:

generating a score for each of the plurality of sequences; and

selecting the value for the sensitivity parameter based on the scores (Column 7,

Lines 17-29).

With regards to Claim 6, Wilks teaches the method wherein generating the

plurality of sequences comprises:

inferring a statistical distribution of a known type to characterize the first portion

of the data stream; and

generating the plurality of sequences from the statistical distribution (Column 7, Line 66 – Column 9, Line 30).

With regards to Claim 7, Wilks teaches the method wherein the statistical distribution is a discrete distribution containing data points from the first portion of the data stream, and wherein generating the plurality of sequences from the statistical distribution comprises selecting data points from the discrete distribution (Column 4, Lines 7-22, Column 7, Lines 66 – Column 8, Line 35).

With regards to Claim 8, 28, Wilks teaches the method wherein inferring a known type of distribution comprises determining a set of parameters corresponding to the known type of statistical distribution (Column 7, Lines 66 – Column 8, Line 35).

With regards to Claim 9, Wilks teaches the method wherein generating the plurality of sequences comprises:

selecting a change based on a distribution of changes; and

generating a changed sequence based on the selected change (Figure 1A, Column 7, Lines 66 – Column 8, Line 37).

With regards to Claim 10, Wilks teaches the method wherein the value of the sensitivity parameter comprises determining a plurality of values for the sensitivity parameter using the plurality of sequences (Column 7, Lines 17-Column 8, Line 15).

With regards to Claim 11, Wilks teaches the method wherein determining the value of the sensitivity parameter comprises calculating a transformation of a second of the plurality of values for the sensitivity parameter (Column 7, Lines 17-Column 8, Line 15).

With regards to Claims 14, 20-21, and 23, Wilks teaches the method comprising raising an alarm when a respective detector signals detection when parameterized by the respective sensitivity parameter and run on a second portion of a sufficient set of data streams (Column 7, Lines 17-Column 8, Line 15).

With regards to Claim 29, Wilks teaches system wherein for detecting comprises means for detecting an interesting event in a parameter of the plurality of distributions (Column 7, Lines 17-Column 8, Line 15).

With regards to Claim 30, Wilks teaches the system comprising means for injecting a change into the first portion of the data stream (Column 7, Lines 17-Column 8, Line 15).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 13 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilks (6,107,919) in view of Cox et al. (5,734,592).

Regarding claims 13 and 24, Wilks teaches all the limitations discussed above, however Desai does not teach a method for determining the value for the sensitivity parameter comprises determining the value for the sensitivity parameter at lease partially on cost parameters.

Cox teaches a method for determining the value for the sensitivity parameter comprises determining the value for the sensitivity parameter at least partially on cost parameters (Claims, Column 11, Claim 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include teaches a method for determining the value for the sensitivity parameter comprises determining the value for the sensitivity parameter at lease partially on cost parameters as taught by Cox into Wilks for the purpose of providing increase in operational time

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sujoy K. Kundu whose telephone number is 571-272-8586. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SKK
12/15/2006

/John Barlow/
Supervisory Patent Examiner
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